## REMARKS

### Summary

The Application has been carefully reviewed in light of the Office Action dated August 24, 2007. In this response, Claims 1, 5, 12, 13, 16 and 17 are amended, Claim 15 is cancelled, Claims 18-19 are added. Accordingly, Claims 1, 5, 12, 13 and 16-19 are pending in the application. Reconsideration and further examination is respectfully requested.

### Claim rejections under 35 U.S.C. § 112

In lieu of the present Amendment, the rejections for Claims 1, 12, and 15-17 are now moot. The newly added determining means is supported in the specification as described in steps S96 to S98 of FIG. 16. As such, Applicants respectfully request the Examiner to withdraw the rejections for Claim 1, 12, and 15-17.

In view of the present Amendment, Claim 17 is now provided with proper antecedent basis. As such, Applicants respectfully request the Examiner to withdraw the rejections for Claim 17.

### Claim rejections under 35 U.S.C. § 103

Claims 1, 5, and 12-13 are rejected under 35 U.S.C. § 103(a) over US Patent No. 6,493,468 (Matsuura) and US Patent No. 6,460,127 (Akerib). Applicants respectfully traverse the above-noted claim rejections.

Turning to the specific language of the claim, amended independent Claim 1 is directed to an image processing device comprising, calculating means for calculating a highlight point and a shadow point of an image from a histogram of the image, first generating means for generating a gradation correction based on the highlight point, the shadow point, a target highlight point and a target shadow point, detecting means for detecting a face region in the image, determining means for determining a representative luminance of the detected face region

-6-

based on a histogram of the face region, the histogram of the face region being corrected based on the highlight point and the shadow point, second generating means for generating an exposure correction based on a histogram of the representative luminance, and correcting means for correcting the image based on the gradation correction and the exposure correction.

Turning to the art rejections, the Office Action conceded that Matsuura does not disclose "the detecting means for detecting a face region in the image; second generation means for generating an exposure correction based on a histogram of the face region; and correcting means for correcting the image based on the gradation correction and the exposure correction" (page 4, Office Action). Instead, the Office Action relies on Akerib for teaching the above features.

Akerib is seen to teach a signal processing apparatus for processing a plurality of samples of an incoming signal in parallel. While Akerib mentions face recognition, Akerib does not provide specific processing steps regarding face recognition. In fact, Akerib merely discloses face recognition as an example of signal processing. As such, Akerib is not seen to disclose or suggest, *inter alia*, "...determining means for determining a representative luminance of the detected face region based on a histogram of the face region, the histogram of the face region being corrected based on the highlight point and the shadow point...". Also, while Akerib mentions exposure correction, Akerib is not seen to provide specific process steps regarding exposure correction. As such, nowhere is Akerib seen to disclose or suggest "generating an exposure correction based on a histogram of the representative luminance".

Applicants respectfully disagree that the combined references, namely Matsuura and Akerib, would render the invention of Claim 1 obvious. Even if Matsuura is combined with Akerib, the combination would not teach correcting an image based on both "gradation correction" and "exposure correction" as disclosed in Claim 1.

Based on the foregoing, Applicants respectfully submit that the applied arts, namely Matusuura and Akerib, either alone or in combination, are not seen

to disclose or suggest at least the above-noted features of amended independent Claim 1. Hence, the applied arts are not seen to render Claim 1 obvious. Claim 1 is therefore believed to be in condition for allowance. As such, Applicants respectfully request the Examiner to withdraw the rejection and indicate Claim 1 as allowable at the Examiner's earliest convenience.

In addition, amended independent Claim 12 includes substantially similar features as that of amended independent Claim 1 and was rejected for the same reasons as Claim 1. Therefore, Claim 12 is also believed to be in condition for allowance for at least the reasons discussed above with respect to Claim 1. As such, Applicants respectfully request that the Examiner withdraw the rejection of Claim 12, and indicate that Claim 12 is allowable at the Examiner's earliest convenience.

Turning to the specific language of Claim 5, amended independent Claim 5 is directed to an image processing method comprising, calculating a highlight point and a shadow point of an image from a histogram of the image, generating a gradation correction based on the highlight point and the shadow point, detecting a face region in the image, calculating a representative luminance of the detected face region, setting a target luminance based on the representative luminance and reference face luminance, generating an exposure correction based on the representative luminance and the target luminance, and correcting the image based on the gradation correction and the exposure correction.

Turning the rejections for Claim 5, the Office Action conceded that Matsuura does not disclose "detecting a face region in the image; generating an exposure correction and correcting the image" (page 5, Office Action). Instead, the Office Action relies on Akerib for teaching the above features.

As disclosed in Claim 5, the representative luminance is calculated based on the detected face region. As such, if Matsuura does not teach detecting a face region, Matsuura cannot possibly disclose or suggest representative luminance. In addition, Matsuura is not seen to suggest "a target luminance" that is based on the "representative luminance" and "reference face luminance".

As described above with respect to Applicants comments for Claim 1, Akerib fails to provide specific processing steps regarding face recognition. Also, Akerib fails to remedy the foregoing deficiencies of Matsuura. In all, Applicants respectfully disagree that the combined references, namely Matsuura and Akerib, would render the invention of Claim 5 obvious. Even if Matsuura is combined with Akerib, the combination would not teach correcting an image based on both "gradation correction" and "exposure correction" as disclosed in Claim 5.

Based on the foregoing, Applicants respectfully submit that the applied arts, namely Matusuura and Akerib, either alone or in combination, are not seen to disclose or suggest at least the above-noted features of amended independent Claim 5. Claim 5 is therefore believed to be in condition for allowance. As such, Applicants respectfully request the Examiner to withdraw the rejection and indicate Claim 5 as allowable at the Examiner's earliest convenience.

In addition, amended independent Claim 13 includes substantially similar features as that of amended independent Claim 5 and was rejected for the same reasons as Claim 5. Therefore, Claim 13 is also believed to be in condition for allowance for at least the reasons discussed above with respect to Claim 5. As such, Applicants respectfully request that the Examiner withdraw the rejection of Claim 13, and indicate that Claim 13 is allowable at the Examiner's earliest convenience.

Furthermore, the newly added Claims 18 and 19 are computer-readable storage medium claims that contain substantially similar features as that of Claim 1 and Claim 5, respectively. Therefore, Claims 18 and 19 are also believed to be in condition for allowance.

The other pending claims remaining under consideration in this application are each dependent from the independent claims discussed above and are therefore believed to be in condition for allowance for the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merit is respectfully requested.

# CONCLUSION

Any amendments to the claims which have been made in this response which have not been specifically noted to overcome a rejection based upon prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

If any additional fee is required, please charge Deposit Account Number 502456.

Should the Examiner have any questions, the Examiner may contact Applicants' representative at the telephone number below.

Respectfully submitted,

11/21/07                                  /Trevor Chuang/

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